

From: rogers, rick
Sent: Friday, October 21, 2016 9:25 AM
To: Bennett, James; Branby, Jill
Cc: Nelson, Mark
Subject: FW: Hampton Roads aquifer recharge project

Fyi,

See the message, at the bottom of this chai, from HQ regarding today's Washington Post article about HRSD's SWIFT project. After speaking with Mark to get caught up, I sent the response immediately below.

Rick

[illegible]

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From: rogers, rick
Sent: Friday, October 21, 2016 9:14 AM
To: Bergman, Ronald <Bergman.Ronald@epa.gov>
Cc: Green, Holly <Green.Holly@epa.gov>
Subject: RE: Hampton Roads aquifer recharge project

Hi Ron,

The article is a bit misleading.

The well that was drilled is going to be initially used for aquifer testing to assess physical and chemical properties of the aquifer (porosity, permeability, drawdown, and chemistry). Once all the aquifer characteristics are known, that well will be converted into a pilot injection well. That pilot well will be permitted by rule by Region 3 and injection testing will ensue on that well for a number of months.

The pilot work that is in the works now is the pilot testing of a couple of different options for advanced waste water treatment.

HRSD is submitting all the necessary information to receive the permit by rule approval. That will include the well's physical construction characteristics, the results from the aquifer testing (we've been seeing that piecemeal thus far), proposed advanced treatment on the injected water and proposed operational parameters.

Once the pilot injection work is done and things go well, HRSD will be submitting full applications for class V injection wells for the actual operational wells prior to those wells being built and operated. That probably will not start to happen for at least a year. As they mention in the article, the full project won't be completed until sometime between 2020 and 2030, so the UIC permitting will occur as they are ready to start injection at each site.

The article alluded to the DOJ being involved. There is a Clean Water Act (CWA) side to this project that is far less certain. HRSD is currently under a consent order to address long-standing CSOs and discharge to the Chesapeake Bay. This aquifer replenishment idea was born out of HRSD's idea that they could meet the CWA requirements and help with the problems already apparent from the overuse of the Potomac Aquifer. I think the CWA programs and DOJ are not so certain that the timeline for this project would meet the consent decree timelines. Without agreement from the CWA folks that this project is an acceptable means to comply with the enforcement action, the whole thing might not move forward. But, there is support for it coming from all directions, so I'm sure there will be a lot of work done to iron out the CWA concerns.

Let me know if you have any other questions.

Rick

[illegible]

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From: Bergman, Ronald
Sent: Friday, October 21, 2016 7:49 AM
To: rogers, rick <rogers.rick@epa.gov>
Cc: Green, Holly <Green.Holly@epa.gov>
Subject: Hampton Roads aquifer recharge project

Hi Rick,

The link below is an article in the Washington Post today about the potential Hampton Roads aquifer recharge project. Region 3 has primacy for the needed UIC permit, correct? I think I remember Karen discussing this project. The article says that the planning and demo have started without getting Region 3 approval. Do you know when you would expect to get something?

I don't need much information beyond my questions, above. The article is informative. Since this is on the main page of the Washington Post website, though, I expect someone to ask us. Thank you

https://www.washingtonpost.com/national/health-science/hampton-roads-solution-to-stop-the-land-from-sinking-wastewater/2016/10/20/9537865a-8198-11e6-b002-307601806392_story.html?hpid=hp_local-news_aquifer-955pm%3Ahomepage%2Fstory

Ron Bergman
Associate Director, Drinking Water Protection Division

